

In The Claims:

1. (currently amended) A method of dynamically redeploying web services in a computing network, the method comprising:
 receiving a redeployment trigger for a selected web service wherein the selected web service includes executable code;
 determining one or more network locations where the selected web service including the executable code has been deployed from its original location at an origin server;
 programmatically removing the selected web service including the executable code from the network locations and the origin server; and
 programmatically replacing the selected web service at the network locations and the origin server.
2. (original) The method according to claim 1, wherein the redeployment trigger comprises a redeployment request from the origin server.
3. (currently amended) The method according to claim 1, further comprising:
 sending the redeployment trigger when the selected web service including the executable code is to be revised.
4. (currently amended) The method according to claim 1, further comprising:
 receiving client requests for the selected web service;
 serving the received requests from the network locations prior to receiving the redeployment trigger; and
 serving the received requests using the replaced web service after programmatically removing the selected web service and programmatically replacing the selected web service.
5. (currently amended) The method according to claim 1, further comprising:

unpublishing the selected web service after receiving the redeployment trigger, until completion of programmatically removing the selected web service and programmatically replacing the selected web service, and then republishing the selected web service thereafter.

6. (previously presented) The method according to claim 2, further comprising:
sending a subsequent redeployment request to each of the network locations, responsive to receiving the redeployment request from the origin server.

7. (currently amended) The method according to claim 6, wherein programmatically removing the selected web service further comprises:

receiving the subsequent redeployment request at a selected one of the network locations;
programmatically shutting down the selected web service at the selected one, responsive to receiving the subsequent redeployment request; and

programmatically removing the executable code which implements the selected web service from a run-time environment of the selected one, subsequent to the programmatically shutting down.

8. (currently amended) The method according to claim 6, wherein programmatically replacing the selected web service further comprises:

issuing a deployment request for the selected web service from a selected one of the network locations;

receiving a response message at the selected one of the network locations, the response message containing a replacement for the selected web service; and

deploying the replacement for the selected web service at the selected one of the network locations.

9. (currently amended) The method according to claim 8, wherein the deployment request comprises a web service description of the selected web service encoded in a standardized web service description notation.

10. (currently amended) The method according to claim 9, wherein the web service description comprises an interface definition of a dynamic deployment web service and an implementation definition of the dynamic deployment web service.

11. (currently amended) The method according to claim 10, wherein the dynamic deployment web service resides on the origin server.

12. (original) The method according to claim 11, wherein the issued deployment request comprises a SOAP ("Simple Object Access Protocol") request.

13. (original) The method according to claim 11, wherein the issued deployment request comprises an XML ("Extensible Markup Language") Protocol request.

14. (currently amended) The method according to claim 11, wherein the issued deployment request identifies the selected web service.

15. (original) The method according to claim 11, wherein the issued deployment request provides information about run-time conditions on the selected one of the network locations.

16. (original) The method according to claim 8, wherein the replacement comprises executable code.

17. (original) The method according to claim 16, wherein the executable code is automatically adapted to the run-time conditions on the selected one of the network locations.

18. (currently amended) A system for dynamically redeploying web services in a computing network, comprising:

means for receiving a redeployment trigger for a selected web service wherein the selected web service includes executable code;

means for determining one or more network locations where the selected web service including the executable code has been deployed from its original location at an origin server;

means for programmatically removing the selected web service including the executable code from the network locations and the origin server; and

means for programmatically replacing the selected web service at the network locations and the origin server.

19. (currently amended) A computer program product for dynamically redeploying web services in a computing network, the computer program product embodied on one or more computer-readable media and comprising:

computer-readable program code configured to receive a redeployment trigger for a selected web service wherein the selected web service includes executable code;

computer-readable program code configured to determine one or more network locations where the selected web service including the executable code has been deployed from its original location at an origin server;

computer-readable program code configured to programmatically remove the selected web service including the executable code from the network locations and the origin server; and

computer-readable program code configured to programmatically replace the selected web service at the network locations and the origin server.

20. (previously presented) The system according to Claim 18 wherein the redeployment trigger comprises a redeployment request from the origin server.

21. (previously presented) The computer program product according to Claim 19 wherein the redeployment trigger comprises a redeployment request from the origin server.

22. (currently amended) The system according to Claim 18 further comprising:

means for sending the redeployment trigger when the selected web service is to be revised.

23. (currently amended) The computer program product according to claim 19 further comprising:

computer-readable program code configured to send the redeployment trigger when the selected web service is to be revised.

24. (new) The method according to claim 1:

wherein determining one or more network locations where the selected web service has been deployed includes determining all of the network locations where the selected web service has been deployed;

wherein programmatically removing the selected web service from the network locations includes programmatically removing the selected web service from all of the network location where the web service has been deployed; and

wherein programmatically replacing the selected web service at the network locations includes programmatically replacing the selected web service at all of the network locations where the web service has been deployed.

25. (new) The method according to claim 1 wherein programmatically replacing the selected web service at the network locations comprises replacing the selected web service with an updated web service including updated executable code.

26. (new) The system according to claim 18:

wherein the means for determining one or more network locations where the selected web service has been deployed includes means for determining all of the network locations where the selected web service has been deployed;

wherein the means for programmatically removing the selected web service from the network locations includes means for programmatically removing the selected web service from all of the network location where the web service has been deployed; and

wherein the means for programmatically replacing the selected web service at the network locations includes programmatically replacing the selected web service at all of the network locations where the web service has been deployed.

27. (new) The system according to claim 18 wherein the means for programmatically replacing the selected web service at the network locations comprises means for replacing the selected web service with an updated web service including updated executable code.

28. (new) The computer program product according to claim 19:

wherein the computer-readable program code configured to determine one or more network locations where the selected web service has been deployed is further configured to determine all of the network locations where the selected web service has been deployed;

wherein the computer-readable program code configured to programmatically removing the selected web service from the network locations is further configured to programmatically remove the selected web service from all of the network location where the web service has been deployed; and

wherein the computer-readable program code configured to programmatically replacing the selected web service at the network locations is further configured to programmatically replace the selected web service at all of the network locations where the web service has been deployed.

29. (new) The computer program product according to claim 19 wherein the computer-readable program code configured to programmatically replace the selected web service at the network locations is further configured to replace the selected web service with an updated web service including updated executable code.